

Work Order ID 148999

Thursday, July 14, 2016 1:25:52 PM

148999

Page 1

Item ID: D4287-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Uhmw U-Channel

Start Date: 7/14/2016 Start Qty: 24.00

24

Cust Item ID:

Required Date: 7/28/2016 Req'd Qty: 24.00

24

Customer:

Reference:

Approvals: Process Plan:

DAS

21

9-89

Date: JUL 14 2016 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

D4287

A

100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 33051
Material: UHMW (white)
Supplier P#: McMaster-Carr 9928K53
Material release note required

24

JUL 14 2016

DAS

13

9-89

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.08

Packaging

24k Sp/6-7-2e

120

QC18 In-Coming Inspection Material

0.00

120

QC

Memo

0.00

Quality Control

(24)

DAS

38

9-89

AUG 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Work Order ID 148999

Thursday, July 14, 2016 1:25:52 PM

148999

Page 2

Item ID: D4287-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Uhmw U-Channel

Start Date: 7/14/2016 Start Qty: 24.00

24

Cust Item ID:

Required Date: 7/28/2016 Req'd Qty: 24.00

24

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

130

Identify as per dwg & Stock Location **S479A**

0.00

130

Packaging

Memo

0.04

Packaging

DAS
6
9-89

24

AUG 23 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.40

Quality Control

DAS
21
9-89

AUG 24 2016

DAS
21
9-89

AUG 23 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
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		OTHER : ☐							

Picklist Print

Thursday, July 14, 2016 1:25:57 PM

Page 1
1

Work Order ID: 148999

148999

Parent Item: D4287-1

D4287-1

Parent Item Name: Uhmw U-Channel

Start Date: 7/14/2016

Required Date: 7/28/2016

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP Rev:A 10.11.15 new issue DD Verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
9928K53		Purchased	No			110	f	0.0000	1	24			

9928K53

UHMW U-Channel

**

24px 8p/6-7-20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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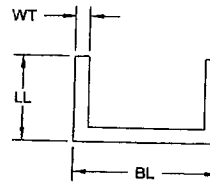
SPECIFICATION CONTROL DRAWING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

NO. 148 999 M.C.S

1607-14



D4287-X UHMW U-CHANNEL

DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	MATERIAL	PURCHASED LENGTH	BASE LENGTH (BL)	LEG LENGTH (LL)	WALL THICKNESS (WT)	WEIGHT (lbs)
D4287-1	McMASTER-CARR	9928K53	UHMW (WHITE)	96.0	1.05	0.75	0.250	2.11
D4287-3	McMASTER-CARR	8672K31	UHMW (WHITE)	96.0	1.25	0.75	0.125	1.29

RELEASED
2010-11-03

NOTES:

- 1) MATERIAL: PURCHASE PER TABLE
OR
UHMW BLACK TIVAR 1000 VIRGIN MATERIAL
REF. DART SPEC. MUHMW
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: NONE
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: PER TABLE

A	NEW ISSUE	DESCRIPTION	MB	10.10.26
REV.			BY	DATE
DESIGN		DART AEROSPACE LTD		
DRAWN		HAWKESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		DSC-D4287	SHEET 1 OF 1	
APPROVED		TITLE	SCALE	
DE APPR.		UHMW U-CHANNEL	NTS	
DATE	10.10.26	COPYRIGHT © 2010 BY DART AEROSPACE LTD		
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR OFFICE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.				



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33051

Purchase Order Date 7/14/2016

PO Print Date 7/14/2016

Page Number 1 of 4

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

JUL 14 2016

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	6718K52 AS PER DWG D4182 REV. B B148997	Fitting, Quick Disconnect	7/18/2016 Yes 7/18/2016		8.00 Each	\$5.81	\$46.48
Line Total:							\$46.48
2	9928K53 AS PER DWG D4287 REV. A B148999	UHMW U-Channel	7/18/2016 Yes 7/18/2016		24.00 f	\$2.28	\$54.72
Line Total:							\$54.72
3	71500-30	91732A214 HELICOIL	7/18/2016 Yes 7/18/2016		4.00 Each	\$6.44	\$25.76

Note:

7/14/2016



McMASTER-CARR®

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO33051

Order Placed By
Chantal Lavoie

McMaster-Carr Number
5900061-01

Page 1 of 1

07/14/2016

Line	Product	Ordered	Shipped
2	9928K53 Impact-Resistant UHMW Polyethylene U-Channel, 1" Base X 3/4" Legs, 1/4" Thick, 8' Long	24 Feet	24 ✓

Sp/16720

**ORIGINAL COMMERCIAL
INVOICE
CERTIFICATE OF ORIGIN**

Tax Number:

Billing
Attention:
Shipping
Attention:
Contact: